AMENDMENTS TO THE CLAIMS

The following listing of claims shows the status of every claim that is, or ever was, in the instant application. This listing will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1 (Previously presented). A method for conditioning at least one conditionable participant in a fuel cell reaction system to form a conditioned participant in said fuel cell reaction system comprising:

applying at least one conditioning energy, excluding a spectral conditioning catalyst, to said at least one conditionable participant, excluding a physical catalyst and a reactant, in said fuel cell reaction system, to cause at least one of the formation, stimulation and stabilization of at least one conditioned participant, whereby said at least one conditioning energy comprises at least one frequency selected from the group consisting of direct resonance conditioning frequencies, harmonic resonance conditioning frequencies and non-harmonic heterodyne conditioning resonance frequencies.

2 (Previously presented). The method of claim 1, wherein said conditioned participant resonantly transfers energy with at least one participant in said fuel cell reaction system to affect at least one reaction pathway in said fuel cell reaction system.

3 (Previously presented). The method of claim 2, further comprising applying at least one spectral energy pattern to said fuel cell reaction system.

4 (Previously presented). The method of claim 3, wherein a rate of at least one reaction in said fuel cell reaction system is accelerated.

5 (Previously presented). The method of claim 1, wherein said fuel cell reaction system comprises:

at least one member selected from the group consisting of an alkaline fuel cell, a direct methanol fuel cell, a membrane/electrode assembly, a molten carbonate fuel cell, a phosphoric acid fuel cell, a polymer electrolyte membrane fuel cell, a protonic-ceramic fuel cell, a regenerative fuel cell and a solid oxide fuel cell.

6 (Previously presented). The method of claim 1, wherein said fuel cell reaction system comprises:

a polymer electrolyte membrane fuel cell.

7 (Canceled).

8 (Canceled).

9 (Canceled).

10 (Canceled).

11 (Canceled).

12 (Canceled).

13 (Canceled).

14 (Canceled).

15 (Canceled).

16 (Canceled).

17 (Canceled).

18 (Canceled).

19 (Canceled).

20 (Canceled).

21 (Canceled).

22 (Previously presented). A method for conditioning at least one conditionable participant in a fuel cell reaction system comprising:

applying at least one conditioning energy, excluding a spectral conditioning catalyst, to said at least one conditionable participant, excluding a physical catalyst and a reactant, in said fuel cell reaction system, to cause at least one of the formation, stimulation and stabilization of at least one conditioned participant, whereby said at least one conditioning energy comprises at least one frequency selected from the group consisting of direct resonance conditioning frequencies, harmonic resonance conditioning frequencies, non-harmonic heterodyne conditioning resonance frequencies, electronic conditioning frequencies, vibrational conditioning frequencies, rotational conditioning frequencies, rotational-vibrational conditioning frequencies, fine splitting conditioning frequencies, hyperfine splitting conditioning frequencies, electric field splitting conditioning frequencies, magnetic field splitting conditioning frequencies, cyclotron resonance conditioning frequencies, orbital conditioning frequencies and nuclear conditioning frequencies.

23 (Previously presented). The method of claim 22, wherein said fuel cell reaction system comprises at least one member selected from the group consisting of an alkaline fuel cell, a direct methanol fuel cell, a membrane/electrode assembly, a molten carbonate fuel cell, a phosphoric acid fuel cell, a polymer electrolyte membrane fuel cell, a protonic-ceramic fuel cell, a regenerative fuel cell and a solid oxide fuel cell.

24 (Canceled).

25 (Canceled).

26 (Canceled).

27 (Canceled).

28 (Canceled).